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John Child Foray celebrates its 20th birthday

Cover Page

The John Child Foray celebrated its 20th meeting and cutting the birthday cake are Bryony Macmillan and Allan Fife. It was Allan and Bryony who initiated and organized the first workshop held at Pelorus Bridge reserve in 1983 and it was a fitting tribute they were present on this occasion to blow out the candles!

20th John Child Workshop
Pohara, Golden Bay, New Zealand, 28th October – 2nd November 2004

It never ceases to amaze that after nineteen forays the conveners of this workshop are able to unearth another superb locality, in the far northwest corner of the South Island of New Zealand. The seaside town of Pohara, in the picturesque Golden Bay, was the base for the 20th John Child workshop. We were accommodated in the local caravan park while the Pohara Hall served as an excellent facility for meals, laboratory and evening discussion sessions. As with the previous workshop there was a large contingent of 45 participants, which included Alison Downing and Nicole Vella from Sydney, and Lyn Cave and Paddy Dalton from Tasmania. Those who traveled by van from Dunedin must have thought they had come from just afar, but such is the increasing support and interest in the New Zealand workshops.

Matt Renner (on the left) acknowledges sound advice from Barbara Polly, one of the workshop conveners and a staunch supporter of the John Child Forays

The Golden Bay district provided the opportunity to explore spectacular karst limestone sites and forests on dolomite at the western end of the bay. Our first day was in mixed beech, podocarp-broadleaf forest on alluvial flats at Washbourn reserve. Here the tree ferns supported the epiphytes *Hymendon pilifer* and *Calomnion complanatum*. Unfortunately our stay was short lived as heavy persistent rain necessitated a quick retreat to the comfort of local cafes in the Pohara township, however this was the only occasion where rain intervened and the remainder of the workshop enjoyed fine and sunny conditions. Later in the day the rain abated and allowed collecting in the nearby Grove reserve which supported rata forest on karst limestone – some notable bryophytes included the introduced *Fissidens taxifolius*, *Leptodon smithii*, while on the karst outcrops the moss *Haplohymenium pseudo-triste* and the hepatic *Radula silvosa* were interesting finds.

On Saturday we wound our way in a convoy of cars up to Takaka Hill. There a short drive led us to the track to Harwoods Hole and lookout with spectacular views on Pikikiruna range. The silver beech forest supported an abundance of bryophytes at the forest floor (*Marchantia foliacea*, *Psilopilum bellii*) as well as on limestone outcrops (*Orthotrichum cupulatum*) and tree trunks (*Mesotus celatus*). Later in the afternoon,

Rameka track in the adjoining Mt. Abel Tasman National Park provided a good array of *Dicranoloma* species (*D. dicarpum*, *D. plurisetum*, *D. robustum* and *D. menziesii*).
Mt. Burnett was the challenge for Sunday's fieldwork. A 641m dolomite hill in the far northwest of the south Island which at the top provided spectacular views to the west and towards Farewell Spit. Vehicle access only took us halfway, however the walk up the quarry road allowed leisurely exploration of the embankments. Here good fertile material of *Marchantia pileata* was plentiful while the track itself had some excellent fruiting material of the introduced *Calliergoniella cuspidata*. Near the summit in the scrub rainforest there were healthy hepatic populations. These included two species of *Bazzania* (*B. adnexa* and *B. involuta*), *Heteroscyphus decipiens* and *H. cymbaliferus* while the trunks of *Nothofagus solandri* were host to the epiphytes *Herbertus oldfieldianus* amongst the tiny filmy fern *Hymenophyllum armstrongii*, *Lepicolea scolopendra* and *Radula grandis*.
Our last day in the field was spent closer to Pohara at Te Waikoropupu Springs and nearby walkway. At the Springs a number of interesting aquatic bryophytes were observed – the hepatics *Chiloscyphus austrigenus* and an interesting form of *Radula buccinifera* while *Drepanocladus aduncus* and the debatable *Hypnobartlettia fontana* were indicative aquatic mosses. In the forest at the walkway good populations of *Dawsonia superba* and *Achrophyllum quadrifarium* were seen, while other notable mosses *Hypnodendron kerri* and *Cyrtopus setosus* were in excellent fertile stages.

Jessica Beever (on the left) & Pat Brownsey, two long standing workshop participants, identify collections from the day's field work

The evening sessions commenced with dinner prepared by our caterers from the local restaurant. These were of exceptional quality and greatly enhanced by a bottle or two of a reasonably priced local beverage. With our appetites well satisfied, our minds were tested with a diverse range of informative talks, which included:

- The botanical environment of Golden Bay – Simon Walls
- An outline of a research program to analyse and model the breeding systems in mosses – Phil Garnock-Jones
- A reconsideration of species in *Pleurophascum* – Allan Fife
- The moss flora of the Christchurch region – Bryony Macmillan
- A pictorial review of the liverworts seen at the Hunua workshop – John Braggins
- The structural diversity in *Radula* and the case for generic revision – Matt Renner
- The value of indigenous mosses to enhance mine site regeneration – Rowan Buxton

Field leaders David Glenny (on the left) and Leon Perrie "fuel-up" for the next day's exercise

Tuesday morning saw the conclusion of another successful workshop. Our thanks to the conveners who were competently led by Peter Beveridge and ably backed up by two stalwarts, Barbara Polly and master of the financial spreadsheet, Rodney Lewington, about which questions are still being asked! Our energetic field leaders, David Glenny and Leon Perrie, are to be congratulated on ensuring that a diverse range of sites met with everybody's interests. During our discussions on the last evening it was voted that we hold the 2005 John Child workshop on the North Island and Lynette Fischer and Susan Hansard accepted to convene the 21st foray near Palmerston North.

Paddy Dalton, School of Plant Science, University of Tasmania

OBITUARY
Brenda Hammersley – Western Australian Bryologist, 1929 – 2004

Australian and New Zealand bryologists were saddened to hear that Brenda Hammersley died early in 2004. Brenda, a retired paediatrician from Denmark in the south-west of Western Australia, contributed significantly to bryology in that state.

Brenda was born at Birchip on the border of the Victorian Mallee and Wimmera in 1929, and, largely influenced by her mother, it was here that her love of, and interest in botany began. She went on to study medicine at Melbourne University and had an extraordinary career, which took her to England, to New Guinea and finally to Western Australia, where she was the Paediatrician (the School Doctor) for the south-west region of the Education Department. But no matter where she lived, Brenda continued her interest in botany and in 1989 began to work with the Western Australian Herbarium on the vascular flora of the south-west, and for the last 13 years was on the committee of the Department of Conservation and Land Management's Rare Flora Discovery Team. In this time, two plants were named after her: *Andersonia hammersleyana* and *Laxmannia grandiflora* subsp. *Brendae.* Brenda's interests were not just limited to plants, and she worked closely with mycologist, scientific illustrator and close friend Katie Syme.
It was in the late 1990's when Brenda sent specimens of Western Australian mosses to the National Herbarium of New South Wales that her involvement with Australian and New Zealand bryologists commenced in earnest. In a very short time she became expert in the identification of mosses and liverworts, and corresponded regularly with bryologists in Sydney and Canberra. Later, Brenda visited the National Herbarium of Victoria and established contact with bryologists Pina Milne and Karen Beckman. At the 2001 Australasian Bryological Workshop, Brenda contributed a paper on her re-discovery of the very rare Western Australian moss, *Pleurophascum occidentale.* Brenda also sought and located *Sphagnum novozelandicum,* which many thought no longer survived in Western Australia.
Later, encouraged by her eastern Australian colleagues, Brenda established friendships with bryologists further afield, including Jessica Beever in Auckland and Alan Fife in Christchurch. In 2002, she was delighted to have Jessica and Ross Beever visit her in Denmark. She wrote to me "a red letter day for me – my first meeting with a real live bryologist." Jessica was delighted and amused at the white linen table napkins on the dinner table on their return to

Brenda's house after a long morning in the field. Brenda loved bryophyte names, and insisted that the smaller the plant, the longer the name, her favourite being *Chaetophyllopsis whiteleggei.* Brenda used modern technology to a point, using a GPS in the field, and a lap top computer for her records but she refused absolutely to use the internet and email!! Brenda undertook a prodigious workload for the Western Australian Herbarium, identifying many bryophytes that had been sitting, unnamed, in boxes on shelves for many, many years.

Brenda Hammersley (on the right) with Jessica Beever in the field at Denmark, Western Australia, 15th September, 2002

Apart from Brenda's professional contribution, we miss her informative letters and we miss the challenging specimens sent for identification or confirmation. In fact, over the last few years, as she became so expert, arrival of a packet from Bavin Street, Denmark, was almost viewed with fear and trepidation!! We will miss her enthusiasm, her warmth and her great sense of humour.

Alison Downing and Ron Oldfield, Macquarie University, NSW.

Bryophyte Records

Climacium dendroides (Hedw.) Web. et Mohr in Tasmania

Whilst literature records for the occurrence of this moss in Tasmania have existed for some time, there have been no supporting specimens lodged at the Tasmanian Herbarium. Reference to a literature report was made by Martin in 1946. However, when Ilma Stone noted the discovery of *Climacium* in Victoria in 1985, she claimed it as a new record for Australia. Following this, it was listed amongst the "Doubtful and Excluded Records" for Tasmania by Dalton *et al* (1991).

This distinctive plant, sometimes called "tree moss" because of its habit, has creeping primary stems with erect dendroid branches. The branch leaves are narrower than the stem leaves, and have coarsely toothed margins in the upper part of the leaf. The nerve is single, narrow, and ceases just below the apex. The species is widespread in the Northern Hemisphere, and is also found in Victoria, and on the south island of New Zealand.

Recently, it has been found growing beside a busy highway on Tasman Peninsula, on one of the State's most popular tourist routes. The roadside in that area is shaded by overhanging vegetation, and mats of *Calliergonella cuspidata* and *Eurhynchium praelongum* cover the ground.

It is curious that earlier Tasmanian collectors such as W.A. Weymouth and L. Rodway have not recorded this rather large moss, even though they visited the Tasman Peninsula. Tony Moscal, a prolific collector of more recent times, has also not recorded it, despite extensive surveys of indigenous vegetation in the state. In the light of this, and in view of this specimen occurring beside a main road, it is tempting to regard the taxon as adventive.

Collecting Details:
Tasmania, East Coast Region. Oakwood, Tasman Peninsula, on Arthur Highway.
43° 06' 52.4" S, 147° 51' 20.2" E, altitude 20m.
Habitat: Roadside, in wettest part of a large mat of bryophytes.
Associated species: *Calliergonella cuspidata, Eurynchium praelongum*
L. Cave 408, 25 September 2004, (HO, CHR)

Fig 1. *Climacium dendroides* habit

Fig. 2. Collection location

References:
Dalton, P.J., Seppelt, R.D. & Buchanan, A.M, 1991. An Annotated Checklist of Tasmanian Mosses, in Banks, M.R., Smith, S.J., Orchard, A.E., & Kantvilas, G. (Eds.), Aspects of Tasmanian Botany – A tribute to Winifred Curtis. *Roy. Soc. Tasm*. Hobart: 15-32

Martin, W., 1946. Geographic range and internal distribution of the mosses indigenous to New Zealand. *Trans. Proc. R. Soc. NZ* 76: 162-184

Stone, I.G., 1985. New records of mosses in Australia. *J. Bryol.* 13: 475-478

Lyn Cave, Tasmanian Herbarium, Hobart

New and interesting bryophyte records from New South Wales, Queensland and Victoria

New to Australia

***Heteroscyphus aselliformis* (Reinw. et al.) Nees in Gott. et al.**
QUEENSLAND: Fishery Falls, Bellenden Ker Range, on rock above water line near base of falls. BRI (not yet accessioned).
NOTE: *H. aselliformis* is a widespread species in South East Asia. It is readily distinguished by the shape of the lateral leaves, which taper from a wide base to a narrow point consisting of two long, acute lobes that are often ciliate. Part of the ventral leaf margin is often narrowly inrolled. The underleaves are large and multi-toothed, sometimes with a deep sinus in the centre. The cells of the leaves have large, bulging trigones.

***Heteroscyphus zollingeri* (Gott.) Schiffn.**
QUEENSLAND: Mt Spec National Park, Birthday Creek, epiphytic on *Elaeocarpus* in rainforest gully. BRI (not yet accessioned).
NOTE: A few small stems of this species were found in a mat of *Bazzania*, *Heteroscyphus argutus* and small mosses. It has probably been confused in the past with *H. coalitus*, which also occurs in Queensland, but is immediately distinguished by the underleaves, which are barely if at all 1-connate (clearly 2-connate in *H. coalitus*), and 2-fid with a wide, rounded sinus (4-fid in *H. coalitus*). A further difference is that the leaves of *H. zollingeri* have slightly rounded margins with 1–3 (usually two) apical lobes or teeth (straight margins with constantly 2 teeth in *H. coalitus*). Oil bodies are small, globular and transparent, many per cell. *H. zollingeri* is widely distributed in South East Asia, including New Guinea.
***Plagiochila sciophila* Inoue & Grolle**
QUEENSLAND: Mt Edith track, Tinaroo Range, among *H. fissistipus* on thin soil layer over rock next to creek; BRI (not yet accessioned).
NOTE: This small, semi-erect, branching species has very small and caducous leaves (typically less than 2 mm long) that are ciliate around the distal margins, with the cilia of varying length. This makes it easy to distinguish from other *Plagiochila* species in the region. It is distributed widely in Asia from the Himalaya to New Guinea, with a disjunct occurrence in the USA. There is an excellent description and illustration in Piippo (1989).

New to New South Wales

***Bazzania tridens* (Reinw., Blume & Nees) Trevis.**
NEW SOUTH WALES: Minyon Falls, near Lismore, in lowland rainforest beside stream below waterfall; coll. H. Streimann; CBG 7905831.
NOTE: *B. tridens* is a widespread and common species in tropical and temperate Asia. It has been reported previously for Queensland. This is the southernmost record of the species. It is characterised by underleaves that are largely hyaline except for a small patch of chlorophyllose cells in the base, and small leaves (to about 1 x 0.5 mm) that are clearly tridentate, lack a vitta and have small trigones.
***Bazzania vittata* (Gott.) Trev.**
NEW SOUTH WALES: Nightcap Range National Park; Turntable Creek, north of Nimbin, on rotting stump in rainforest, coll. R.G. Coveny, E.A. Brown and T. Pócs; NSW 606096.
NOTE: This record extends the range of this species beyond the tropical zone. *B. vittata* is one of a group of small *Bazzania* with vittate leaves, a punctate or verrucose cuticle, and entirely or mostly hyaline underleaves. *B. tayloriana* of New Zealand is very similar, but in that species the apex of the underleaf is usually 3-4-lobed to about 1/3. Both species are glaucous blue-green in life. *B. nitida*, also an Australian species, is easily distinguished by its lack of glaucous colour and in having the leaf lobes bent sharply to the ventral side. It also has a distinct patch of chlorophyllose cells at the base of the underleaves.

New to Victoria

***Breutelia elongata* (Hook.f. & Wilson) Mitt.**
VICTORIA: (1) Mount Buffalo; Horn Road near Cannon Hill, on humus-rich boggy ground, coll. G.A.M. Scott and B.A. Fuhrer, 1986; MUCV 7214. (2) Mount Buffalo; no specific locality or habitat details; coll. unknown, probably around 1910; MELU 3309. (3) Blue Range, Back Creek Falls, no habitat details; coll. B. Duncan, 1977; MUCV 3742.
NOTE: This medium to large species of *Breutelia* was thought to be restricted to New Zealand, Tasmania and Macquarie Island. Previous reports from Victoria have turned out to be large forms of *B. pendula*. *B. elongata* is distinguished from *B. pendula* by its generally larger size (most leaves more than 5 mm long), and the long, linear, thick-walled, very porose and regularly arranged cells of the lamina (shorter, thinner-walled, hardly if at all porose and not so regularly arranged in *B. pendula*). Without microscopic analysis it is easily confused with *B. pendula* and *B. affinis*. Because of its very limited distribution and the continuing threat of wildfire at all localities, *Breutelia elongata* must be considered extremely rare and endangered in Victoria.

***Orthotrichum hortense* Bosw.**

VICTORIA: (1) Bogong High Plains, Pretty Valley, north side of Mt Cope, no habitat details; coll. I.G. Stone 1966; MEL 1044741. (2) Bogong High Plains, above Pretty Valley Pondage, no habitat details; coll. I.G. Stone 1969; MEL 2122292, 2122322. (3) Bogong High Plains, Pretty Valley, on branches of shrubs and base of *Eucalyptus pauciflora* on knoll overlooking Cope Creek; coll. 1999; MELU not yet accessioned. (4) Lake Mountain, Echo Flat, on old bark against running water; coll. J.H. Willis 1948; MEL 1519885.

NOTE: *Orthotrichum hortense* is a largely New Zealand species, until now being known otherwise only from one locality at Yarrangobilly Caves in NSW. There has been some conjecture that it might have been introduced there, as the area is a popular tourist destination. These new records indicate that *O. hortense* is indeed an indigenous Australian species. In the field *O. hortense* could be easily mistaken for *O. tasmanicum* or *O. assimile*, but the combination of phaneropore (exposed) capsule stomata and ciliate, hyaline inner peristome is diagnostic.

Other interesting records

***Breutelia pseudophilonotis* (Müll. Hal.) Watts & Whitel**.

NEW SOUTH WALES: (1) Blue Mountains, canyon of Frederica Falls, shaded seepy cliff; coll. W.B. Schofield no. 50883, 9 August 1972; MUCV 3314 (dupl. Hattori Bot. Lab.) . (2) Blue Mountains, Wentworth Falls, no habitat details; coll. M. Fleischer no. B2609, 6 April 1903; MUCV 4969 (ex Museo botanico Berolinensi).

NOTE: This species resembles *B. affinis* but differs in having no or very few alar cells, regularly arranged long-linear but not porose cells throughout the lamina, recurved lower leaf margins, larger leaf size (to 4.5 mm), and leaves widely spreading and flexuose when dry. It is probably more widespread than currently recognised, since it closely resembles *B. affinis* and small forms of *B. pendula* and might have been mistaken for either. The few or missing alar cells are the most obvious characteristic. *B. baeurlenii* (Müll.Hal.) Watts & Whitel. from New South Wales and *B. tabularis* Dixon & Sim from South Africa (Magill 1987) might be the same species; *B. pseudophilonotis* is the earlier name.

***Bazzania wattsiana* (Steph.) comb. nov.**

Basionym: *Mastigobryum wattsianum* Steph., *Bull. Herb. Boissier* ser. 2, **8**(11) 850 (1908); *Spec. Hepat.* **3**: 474 (1908).

NEW SOUTH WALES: Wollemi National Park, Wheeney Creek crossing on Comleroy Road, N of Kurrajong; epiphytic in wet sclerophyll forest along creek; coll. R.G. Coveny & P.D. Hand Oct 1991; NSW 399477.

NOTE: Stephani's type description and unpublished illustration (in his *Icones*) match the Wollemi material perfectly. The illustration is annotated 'Australia. Richmond Falls. N.S. Wales. leg. W.W. Watts. Levier 3588'. I assume that this is the type material, although the herb. Levier number was not quoted in the original description. The species was known previously only from the type. It resembles a small *B. adnexa*, but the leaf cells are larger and arranged in more-or-less linear rows with larger trigones, the leaf apices do not have more than an occasional extra small tooth on the trifid apices, and the underleaves are only very weakly toothed.

***Climacium dendroides* (Hedw.) F.Weber & D.Mohr**

VICTORIA: (1) Bogong High Plains: creek near Tawonga Huts, growing in tussock of *Philonotis scabrifolia* and also in independent colonies, on soil of creek bank under dense canopy of *Bossia foliosa*; coll. March 2004; MELU 3208, dupl. MEL (not yet accessioned). (2) Bogong High Plains, Pretty Valley, headwaters of unnamed creek draining slopes of Mt Jim, in large colony on soil of rocky creek bank under dense cover of *Bossia foliosa* and *Prostanthera cuneata*; coll. March 2004; MELU 3209.

NOTE: A very rare species in Australia, known previously only from two localities on the Dargo High Plains, Victoria, in more open habitats. At the new localities the form is often two-dimensional and fan-like rather than dendroid.

***Plagiochila dendroides* (Nees) Lindenberg**
QUEENSLAND: Millaa Millaa Falls, in dense clumps on twigs in rainforest canopy. BRI (not yet accessioned).
NOTE: This species was known previously only from one collection from Mt Bartle Frere (coll. I.G. Stone, 1980s), without habitat information. It is very distinct in its dendroid habit, growing from a creeping primary stem in repeated ramifications, giving a tiered effect. The shoots are only about 10 mm wide, and the leaves are small and mostly bifid. It is well illustrated in Inoue (1974). Scott *et al* (1997) considered it to be rare or threatened (category 1R).

References

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David Meagher, School of Botany, The University of Melbourne

Forthcoming Workshops

8th Australasian Bryophyte Workshop

The 8th Australasian Bryophyte Workshop will be held at Paluma, tropical North Queensland, in June 2005. The Paluma Range, 65 km north of Townsville, is the most southerly point of the Australian Wet Tropics World Heritage Area.
Workshop activities will include field excursions to local areas of bryological interest (eg. Jourama Falls, Broadwater Forest and Wallaman Falls), special-interest sessions and talks, microscopy and identification, and discussion on all things bryological! Master classes on particular families and genera will be a feature of this workshop.

Conveners: Andi Cairns andi.cairns@jcu.edu.au and David Meagher dmeagher@a1.com.au

Student support for Workshop

The success of recent Australasian workshops has resulted in the accumulation of some surplus funds. At the Mt. Baw Baw meeting it was agreed that a worthy use of these monies be in support of student attendance at future workshops. Therefore a limited number of grants are available to currently enrolled undergraduate or postgraduate Australasian students to attend the Paluma workshop.
A grant will assist in the cost of attendance at the workshop (registration, accommodation etc) and is provided on the basis that the student is presenting a talk or poster.
Applications from students who will be attending are now called and should submit the following details:

- Name and address of tertiary Institution
- Current academic record
- Name of supervisor or lecturer
- Summary of presentation

This should reach Dr. Pina Milne Pina.Milne@rbg.vic.gov.au or Herbarium, Royal Botanic Gardens, Victoria, Australia, no later than 30th April 2005.

21st John Child Bryophyte Workshop

The 21st Workshop will be held from the 8th – 13th December 2005 in the North Island and based in the Pohangina Valley, which is 38km from Palmerston North. The area is in the foothills on the western flank of the southern Ruahine Ranges. Likely sites include the Ruahine Forest Park and forest along the Pohangina River, which includes Kahikatea-pukatea swamp forest as well as totara dominated mixed podocarp forest. As well there are remnants of black beech forest and outcrops of limestone are also found in the area.
Initial indications are that the workshop will be limited to 40 participants.

Conveners: Lynette Fischer lynettefischer@paradise.net.nz and Susan Hansard.

News and Notes

Japanese bryologists, **Hiromi Tsubota from Graduate School of Science, Hiroshima University** and **Tatsuo Furuki from the Natural History Museum and Institute**, **Chiba**, were visitors to Tasmania from 13th – 20th December 2004. Accompanied by Paddy Dalton, a number of field trips were made to rainforest, mixed forest and wet sclerophyll vegetation to primarily collect representatives of the Metzgeriales as part of a morphological and molecular investigation into the phylogeny of this lineage of Hepaticae.

Forgotten Flora project prepared by the Royal Botanic Gardens, Melbourne is completed. For further information please check out the following website:

http://www.rbg.vic.gov.au/plant_science/publications/forgotten_flora